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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/384,088	08/27/1999	BRENDAN MURRAY	52817.000093	7366

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EXAMINER

CHANNAVAJJALA, SRIRAMA T

ART UNIT PAPER NUMBER

2177

DATE MAILED: 12/10/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/384,088

Applicant(s)

MURRAY ET AL.

Examiner

Srirama Channavajjala

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings filed on 8/27/1999 are objected to by the Draftsperson under 37 CFR 1.84 or 1.152 as indicated in the form PTO-948, paper no. # 9 [see PTO-948 attached].

Priority

2. Acknowledgment is made of applicant's claim for domestic priority under 35 U.S.C. 119(e) based on the Provisional Application Serial No. 60/114,574, filed on 12/31/1998.

Information Disclosure Statement

3. The information disclosure statement filed on 8/27/1999, paper no. # 5 has been considered and a copy was enclosed with this office action, paper no. # 9.

Specification

The disclosure is objected to because of the following informalities:

4. The citation to the Cross-Referenced applications at page 1, line 4 and 12 are incomplete. Appropriate correction at page 1, line 4 and 12 is required including updating their status in response to this office action.

5. Applicant has incorporated by reference two co-pending applications, at page [1] of the specification. Examiner notes that incorporation by reference of an application in a printed United States patent constitutes a special circumstance under 35 U.S.C. § 122 warranting that access of the original disclosure of the application be granted. The incorporation by reference will be interpreted as a waiver of confidentiality of only the original disclosure as filed, and not the entire application file, *In re Gallo*, 231 USPQ 496 (Comm'r Pat. 1986). If Applicant objects to access to the entire application file, two copies of the information incorporated by reference must be submitted along with the objection. Failure to provide the material within the period provided will result in the entire application (including prosecution) being made available to petitioner. The Office will not attempt to separate the noted materials from the remainder of the application. Compare *In re Marsh Engineering Co.*, 1913 C.D. 183 (Comm'r Pat. 1913).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1- 2, 4-10, 12-18, 20-26, 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tateno, US Patent No. 5778400 in view of Halstead, Jr. et al. [hereafter Halstead], US Patent No. 5946648.

9. As to Claims 1,9,17, 25, Tateno details a system which including 'evaluating Characters in a message to generate a search index' [see Abstract, fig 1, col 5, line 55-57], examiner interpreting characters in a message corresponds to Tateno's text or word(s), search index corresponds to fig 1, element 14; 'accepting an input of the

characters of the message' [fig 1, col 6, line 60-67], characters of the message corresponds to word(s) or text because text comprises sentences, words, phrases; 'generating a search index based on the results of the evaluation of the message and candidate character sets' [col 8, line 18-36, fig 1-3], examiner interpreting search index corresponds to Tateno's fig 1, element 14, character sets corresponds to tags or words of a structured document as detailed in col 8, line 23-24, however, Tateno does not specifically detail the claimed limitation 'evaluating the message by comparing the characters of the message to a predetermined set of candidate character sets'. On the other hand, Halstead details a system which including 'evaluating the message by comparing the characters of the message to a predetermined set of candidate character sets' [col 9, line 40-50, col 10, line 20-40, line 63-67, col 12, line 65-67], comparing the characters of the message corresponds to Halstead's matching of stem characters in the prefix analysis as detailed in fig 18-19, predetermined set of candidate character sets corresponds to prefix morphology file, fig 18, element 132.

It would have been obvious one of the ordinary skill in the art at the time of applicant's invention to incorporate the teachings of Halstead into searching through a tagged document for the location of a desired word in text using the tags as reference units for search and retrieval using search index system of Tateno because they are both directed to storing and identifying text strings [see Halstead Abstract, fig 3; Tateno Abstract, fig 3], while Tateno specifically teaches search index as detailed in fig 3, element 4. One of ordinary skill in the art at the time of applicant's invention would have

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been motivated to modify Tateno's reference, more specifically modify fig 4 to incorporate templates fig 14, element 98 matching characters connected to the matching, further forming a look up table containing predetermined characters because that would have allowed users of Tateno's search index system to control which relative combination of sets satisfies the matching criteria, bringing the advantages of reduce dependency on static dictionaries and to avoid the access overhead and unknown word identification problems as suggested by Halstead [see col 3, line 55 65].

10. As to Claims 2,10,18, 26, Halstead teaches a system which including 'comparing each character of the message to an entry for each of the candidate character sets in a character table tank' [see fig 14-15, col 9, line 51-60, line 67, col 10, line 1-3, line 26-40], examiner interpreting character table bank corresponds to Halstead's look-up table as detailed in fig 14, element 90.

11. As to Claims 4,12,20, 28, Halstead details a system which including 'universal code is Unicode' [col 8, line 15-21], examiner interpreting Unicode corresponds to Halstead's 16-bit unicode.

12. As to Claims 5,13,21, 29, Halstead details a system which including 'total number of characters matched to each of the candidate character sets' [col 9, line 51-67, col 10, line 1-3, fig 15].

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13. As to Claims 6,14,22, 30, Halstead details a system which including 'selecting a best match based upon the total number of characters matched to each of the candidate character sets' [col 10, line 63-67, col 11, line 1-7].

14. As to Claims 7,15,23, 31, Tateno details a system which including 'evaluating the characters of a query string' [fig 1, col 5, line 18-23].

15. As to Claims 8,16,24, 32, Tateno details a system which including 'performing a search of the query string against searchi indices' [fig 1, 3,5,7,9, col 9, line 20-25], on the other hand Halstead teaches 'character set match' [see fig 15, col 12, line 65-67, col 13, line 56-61]

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16. Claims 3,11,19,27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tateno, US Patent No. 5778400 , Halstead, Jr. et al. [hereafter Halstead], US Patent No. 5946648 as applied to claims 1,9,17,25 above, and further in view of Houchin et al., [hereafter Houchin], US Patent No. 6321192.

17. As to Claims 3,11,19, 27, Halstead teaches a system which including universal code for that character and an indicator in the character table bank indicating whether each of the candidate character sets contains that character' [col 8, line 19-29], however, both Tateno and Halstead do not specifically teach 'performing a logical mask between a universal code'. On the other hand, Houchin details a system which including 'performing a logical mask between a universal code' [see fig 3, fig 5, col 6, line 16-32].

It would have been obvious one of the ordinary skill in the art the time of the applicant's invention to combine the concepts taught by Houchin with the system of Tateno, Halstead because masking used to choose one of several output sequences based on the flag(s) condition, further mask to form the bit mask used to enable or disable various required conditions as detailed in Halstead [see col 6, line 21-23].

Conclusion

The prior art made of record

- a. US Patent No. 5778400
- b. US Patent No. 5946648
- c. US Patent No. 6321192

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

- d. US Patent No. 5758361
- e. US Patent No. 6098071
- f. US Patent No. 5793381
- g. EP457705
- h. EP1056024.
- i. PCT WO 01/20500
- j. EP457707


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srirama Channavajjala whose telephone number is (703)308-8538. The examiner can normally be reached on Monday-Friday from 8:00 AM to 5:30 PM Eastern Time. The TC2100's Customer Service number is (703)306-5631.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene, can be reached on (703) 305-9790. The fax phone numbers for the organization where the application or proceeding is assigned are as follows:

703/746-7238	(After Final Communication)
703/746-7239	(Offical Communications)
703/746-7240	(For Status inquiries, draft communication)
(703)308-6607	(Art Unit)

Any inquiry of general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703)305-9600.



Srirama Channavajjala
Patent Examiner.
December 7, 2001.